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Remarks

Claims 1-35 are pending in the application.

Rejection Under 35 U.S.C. 103

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being obvious in view of United States Patent Number 6,606,427 issued Graves et al. on August 12, 2003 in view of United States Patent Publication Number 2003/0128917 applied for by Turpin et al. which was published on July 10, 2003 by themselves, or in combination with various other references.

Applicants respectfully disagree and traverse these grounds of rejection for at least the following reasons.

The main argument of the Office Action is that the optical tapped delay line (OTDL) of Turpin et al. is the same as applicants' wavelength sieve/combiner, which can then be substituted into the arrangement of Graves et al. to achieve applicants' claimed invention. However, even if it were obvious to make such a substitution, which applicants are not admitting, the assumption that the OTDL of Turpin et al. is the same as applicants' wavelength sieve/combiner is incorrect.

Applicants' claimed wavelength sieve/combiner can split a wavelength division multiplexed (WDM) beam into various discrete wavelength unit beams each of which contains prescribed wavelength channels, or it can cause multiple copies of part or all of the wavelengths to be supplied as outputs. Furthermore, applicant's wavelength sieve/combiner may also function in the opposite direction to combine such various beams into one wavelength division multiplexed beam.

By contrast, the OTDL of Turpin et al. appears to operate in a manner that achieves the same result as is achieved by a diffraction grating, which applicants have previously distinguished from their wavelength sieve/combiner. In particular, the OTDL of Turpin et al. does **not** correspond functionally to applicants' recited element in that the OTDL divides the input signal into continuous and contiguous spectral regions that are analogous to a rainbow. In other words, such the OTDL divides up the spectrum in a continuous and fixed manner by wavelength, and the spatial location at which each particular frequency of light appears is determined based on the wavelength and cannot be

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independently controlled. (See for example Turpin et al, paragraph 360, Figure 45)

Furthermore, the OTDL of Turpin et al. cannot cause multiple copies of part or all of the wavelengths to be supplied as outputs, which is yet a further requirement for a device to be applicants' recited wavelength sieve/combiner.

Note that because applicants' wavelength sieve/combiner can split a wavelength division multiplexed (WDM) beam into various discrete wavelength unit beams each of which contains prescribed wavelength channels, the channels need not all have the same wavelength band. Certainly if all the channels simply have the same wavelength band, and there aren't any multiple copies of part or all of the wavelengths to be supplied as outputs, or vice-versa when used to combine, then all that remains is simply a conventional demultiplexer or multiplexer. However, this is not what applicants' claim language calls for, given that it recites a wavelength sieve/combiner.

Thus, Turpin et al. does not teach applicants' recited wavelength sieve/combiner. Consequently, substituting the OTDL of Turpin et al. for the wavelength multiplexer/demultiplexer of Graves et al. does not achieve applicants' claimed invention, and so applicants' independent claims 1 and 31 are allowable over the combination of Graves et al. and Turpin et al. under 35 U.S.C. 103.

With regards to the dependent claims, all of the rejections are premised on the OTDL of Turpin et al. being applicants' recited wavelength sieve/combiner. However, since it has been shown that the OTDL of Turpin et al. is not applicants' recited wavelength sieve/combiner, as described hereinabove, and there is no argument put forth by the Office Action that any of the other cited references supplies applicants' recited wavelength sieve/combiner so as to render the independent claims obvious, these grounds of rejection cannot be maintained.

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Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

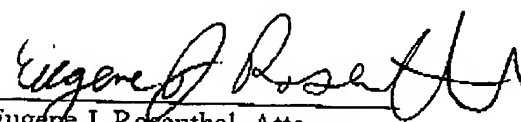
If, however, the Examiner still believes that there are unresolved issues, he is invited to call applicant's attorney so that arrangements may be made to discuss and resolve any such issues.

In the event that an extension of time is required for this amendment to be considered timely, and a petition therefor does not otherwise accompany this amendment, any necessary extension of time is hereby petitioned for, and the Commissioner is authorized to charge the appropriate cost of such petition to the **Lucent Technologies Deposit Account No. 12-2325**.

Respectfully,

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By


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Lucent Technologies Inc.

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